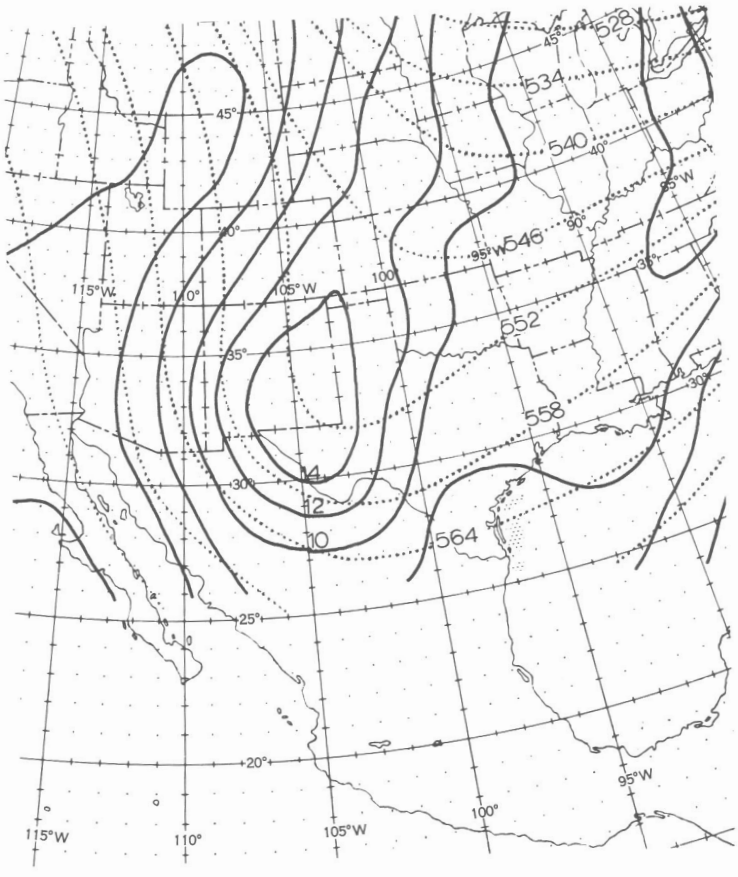

FIGURE 1.—500-mb. analysis, 0000 GMT, February 8, 1967. Solid lines represent vorticity contours and dotted lines 500-mb. height contours.

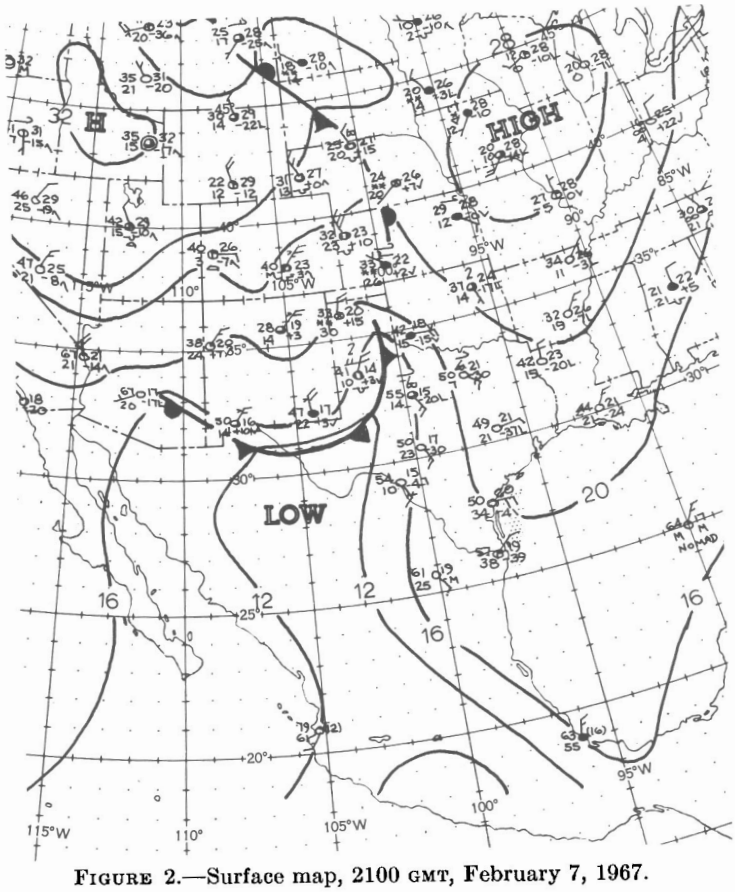

FIGURE 2.—Surface map, 2100 GMT, February 7, 1967.

PICTURE OF THE MONTH

EDWARD W. FERGUSON AND FRANCES PARMENTER
National Environmental Satellite Center, ESSA, Washington, D.C.

At 0000 GMT February 8, 1967, a 500-mb. trough with a closed center of positive vorticity lay over the Texas-New Mexico border (fig. 1). The surface analysis (fig. 2) shows a cold front in the inverted trough over western Texas.

The accompanying ESSA 3 photomosaic (fig. 3) shows the cloud pattern (outlined in white) associated with the surface and 500-mb. systems. Of interest is the cloud band, extending from the Texas-New Mexico border at 105°W., northeastward to 36°N., which bends cyclonically into a center in central New Mexico. This comma-shaped configuration is typical of the shape of cloud pattern produced in a region of positive vorticity. (It is unusual to observe this feature over land although it is common over oceanic areas where the effects of friction are less and moisture is more plentiful.) The striations in the cirroform cloud shield which emanate from a point west of P and extend northeast to Q, suggest sharp anticyclonic flow in the upper levels.

Much of the bright area near R and northward is snow on the Rocky Mountains.

The cloud band in the lower right corner of the mosaic is associated with a cold front extending across the Gulf of Mexico.

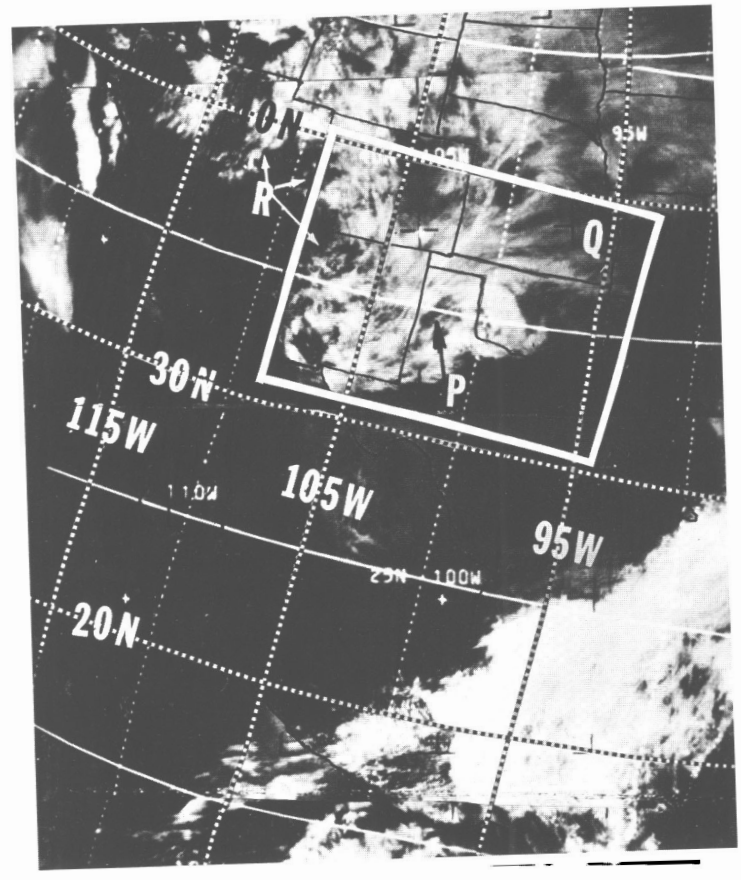

FIGURE 3.—ESSA 3 photomosaic. Pass 1612, 2006 GMT, February 7, 1967.